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<New Framework for Strengthening Monetary Easing: Follow-up Report>

From Quantity to Interest Rate Focus:
BOJ Drops Monetary Base Target
― Flexible JGB Buying Added as Long-Term Interest Rate Policy Focus

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The main pillars of the *"Quantitative and Qualitative Monetary Easing with Yield Curve Control"* announced by the Bank of Japan (BOJ) on 21 September 2016, include (i) "yield curve control," which aims to influence the long end as well as the short end of the yield curve, and (ii) the BOJ's "inflation-overshooting commitment," under which the BOJ will expand liquidity with the aim of achieving a stable, observed inflation rate greater than 2% (Figure 1). For the first time since the BOJ initiated its policy of quantitative and qualitative monetary easing (QQE) in April 2013, the BOJ has, for practical purposes, dropped the monetary base target maintained for nearly three years and added long-term interest rates as a new policy focus. The BOJ will seek to maintain the long-term interest rate at the present 0% level or thereabouts.

Figure 1. Quantitative and Qualitative Monetary Easing with Yield Curve Control

Yield Curve Control	• 【Short-term policy interest rate】The Bank will apply a negative interest rate of minus 0.1 percent to the Policy-Rate Balances in current accounts held by financial institutions at the Bank. • 【Long-term interest rate】The Bank will purchase JGBs so that 10-year JGB yields will remain more or less at around 0%. It will conduct JGB purchases in line with its current pace, an annual increase of about 80 trillion yen, while the guideline for average remaining maturity of the Bank's JGB purchases will be abolished.
Inflation-overshooting Commitment	• 【Monetary base】The pace of increase in the monetary base may fluctuate in the short run under market operations which aim at controlling the yield curve, however, it will continue expanding the monetary base until the core CPI exceeds the price stability target of 2 percent and stays above the target in a stable manner.

In a speech delivered on 5 September 2016, BOJ Governor Haruhiko Kuroda said there was still ample space for further cuts in the negative interest rate and for an increase in the size of the "quantity" dimension, saying that the BOJ had a "broad range of policy options." Indeed, our *ESP Forecast* released on September 7 found that, of 41 private-sector economists surveyed, 25 expected the BOJ to adopt

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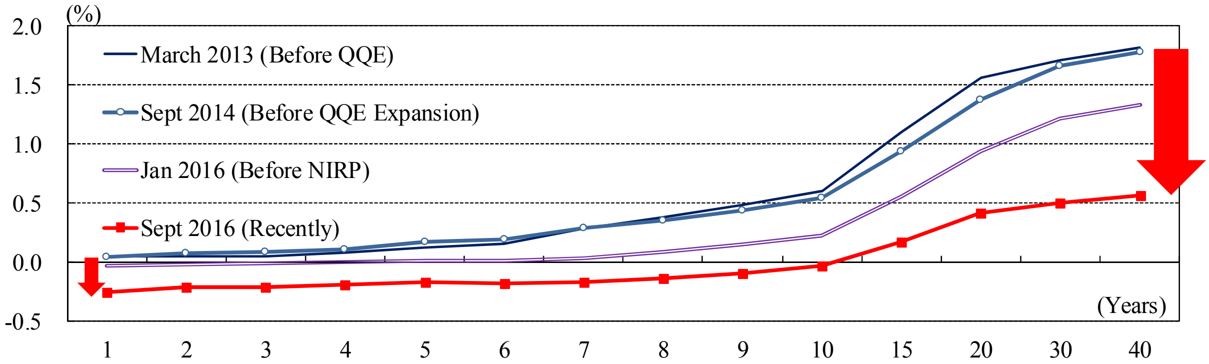
additional easing mechanisms in September. However, the recent *"Quantitative and Qualitative Monetary Easing with Yield Curve Control"* does not include an extension of the negative interest rate or an increase the size of the quantity dimension. This was something of a surprise, but Deputy Governor Hiroshi Nakaso and other executive staff had previously alluded to the BOJ's "Comprehensive Assessment" in talks and other forums in an effort to improve communication of the BOJ's policy. Indeed, the JCER Financial Research Team had previously noted that the BOJ needed to improve the transparency and foreseeability of monetary policy. We believe it would have been preferable had the BOJ given a public assessment of the policy effects of QQE when it originally announced the negative interest rate policy (NIRP) in January 2016, however, the assessment report itself was detailed and thorough.

Long-Term Interest Rates Added to Instrumental Variables

The BOJ describes its new policy as "Quantitative and Qualitative Monetary Easing with Yield Curve Control." It has applied a -0.1% interest rate on a portion of current account balances (policy-rate balances in current accounts) held by financial institutions at the BOJ. However, since the expression "negative interest rate" has a deflationary ring, the BOJ avoided the phrase in naming the new policy. In the new policy framework, the BOJ has shifted focus from quantity to interest rates and for the first time dropped the monetary base numerical targets maintained under QQE. Statements made following Policy Board meetings have in the past included the sentence, "The Bank of Japan will conduct money market operations so that the monetary base will increase at an annual pace of about 80 trillion yen." (The amount was about 60–70 trillion yen prior to the implementation of further monetary easing in October of 2014). However, this phrase is nowhere to be found in the most recent statement. Instead, it includes only a general forecast stating that, "the ratio of the monetary base to nominal GDP in Japan is expected to exceed 100 percent (about 500 trillion yen) in slightly over one year."

The expression "with yield curve control" means that the BOJ will seek to influence the shape of the yield curve. Thus in addition to applying a -0.1% negative interest rate on policy rate balances in current accounts held by financial institutions at the BOJ, the BOJ will endeavor to influence long-term interest rates as well. For example, the BOJ will "purchase Japanese government bonds (JGBs) so that 10-year JGB yields will remain more or less at the current level (around zero percent)," meaning that it has strengthened its commitment to maintaining the 0% long-term rate. For the present, the BOJ will set a minimum long-term rate in an attempt to prevent the yield curve from flattening further, but it may also set a long-term rate cap to prevent it steepening. Since the BOJ adopted NIRP, long-term yields have declined more than the short-term interest rate, leading to a flattening of the yield curve (Figure 2). For a time even the 20-year JGB yield fell into negative territory, causing concern over the impact on the profits of financial institutions, which obtain funds at short-term rates end lend at long-term rates.

Figure 2. JGB Yield Curve Flattens



(Note) Sept 2016 values are based on the average of 1-20 September data.
(Source) Bloomberg

More Flexibility in JGB Buying

As far as the BOJ will focus on interest rates, the quantity element will be determined in due course. With regard to the pace of buying, the BOJ "will conduct purchases more or less in line with the current pace -- an annual pace of increase in the amount outstanding of its JGB holdings," implying that short-term fluctuations will be allowed. In practical terms, this points to increased flexibility in JGB buying. However, the BOJ placed emphasis on the fact that it is taking more control over interest rates, perhaps to avoid the implication of "tapering". The JCER Financial Research team has previously indicated that the BOJ will face limits to its large-scale JGB purchases around mid-2017. At a press conference following the Policy Board meeting, Governor Kuroda dismissed suggestions that the quantitative easing policy was nearing its limits. The recent policy, however, omits any specification for the average remaining maturity of JGBs purchased, which had previously been about 7-12 years. For practical purposes, this may be seen as the BOJ's backing away from qualitative easing. It appears that the BOJ will now shift to a more flexible buying policy, applied to the short end of the yield curve as well. The upshot is that, since the level of JGB purchases may fall below the average pace maintained thus far, the quantitative element in BOJ policy may do so as well. With respect to this flexibility not just regarding flows but stocks (the outstanding monetary base) as well, the BOJ notes "the pace of increase in the monetary base may fluctuate in the short run under market operations which aim at controlling the yield curve."

Maintaining the BOJ's Financial Position

Observers believe that the BOJ will set an upper limit on the purchase price for JBGs having maturities greater than 10 years. If the BOJ continues to hold long-term JGBs, which it bought at prices well above face value and redeems them at maturity, the BOJ will incur losses on redemption. In order to avoid concentrated losses when its JGB holdings reach maturity, the BOJ will use an accounting method known as the amortized cost method in order to spread the losses evenly over each accounting period. If the BOJ's JGB purchase prices rise under negative interest rates, its losses will be exacerbated, which might compromise the BOJ's capital. By preventing the long-term interest rate from falling too far, the BOJ may be able to prevent any deterioration in its financial position.

Scrapping the Two-Year 2% Target

When it adopted the QQE policy in April 2013, the BOJ stated that it would "achieve the price stability target of 2 percent in terms of the year-on-year rate of change in the consumer price index (CPI) at the earliest possible time, with a time horizon of about two years." However, the phrase "about two years" has been dropped from the recent statement. Nearly three and a half years have passed already since the adoption of QQE, and the gap between the 2% target and the observed pace of increase in the CPI has not been closed. This implies that the BOJ's promise (or commitment) to achieving this target on a calendar basis of "about two years" has in some ways made the BOJ's management of monetary policy even more difficult (Figure 3). This is because the Policy Board members, as indicated in the BOJ's "Outlook for Economic Activity and Prices" (the Outlook Report), have rolled back their outlook for inflation four consecutive times, with each release of the Report being followed by calls from market participants for additional monetary easing. Since the deadline of "about two years" has already passed with the result that the phrase is now devoid of significance, retaining it could only have led to a loss of creditability in monetary policy (and the BOJ itself).

Figure 3. Various Inflation Expectation Indices

(%, %pt)

		A. 2013Q1 (Pre-QQE)	B. 2014Q3 (Pre-QQE Expansion)	C. 2015Q4 (Pre-NIRP)	D. 2016Q2 (Post-NIRP)	Difference (D - A)
ESP Forecasts	In 1 year	-0.5	0.6	0.5	0.5	⇧ +1.0
	In 2-6 years	0.7	1.4	1.3	1.0	⇧ +0.3
	In 7-11 years	1.0	1.5	1.4	1.0	⇨ +0.0
QUICK Survey	In the next year	0.1	2.3	0.5	0.3	⇧ +0.2
	In the next 2 years	0.6	2.1	1.0	0.6	⇧ +0.0
	In the next 10 years	1.1	1.6	1.1	0.9	⇩ -0.2
Consensus Forecasts (in 5 years)		0.3	1.6	1.3	1.1	⇧ +0.8
BEI, inflation indexed bonds (10 years)		—	1.1	0.7	0.3	—
Inflation Swap Rate (5 year/ 5 year)		0.8	1.1	0.7	0.1	⇩ -0.7
Tankan (Inflation expectations)	In 1 year	—	1.5	1.0	0.7	—
	In 3 years	—	1.6	1.3	1.1	—
	In 5 years	—	1.7	1.4	1.1	—
Consumer Confidence Survey (In 1 year)		1.9	2.9	2.4	2.1	⇧ +0.2
BOJ Opinion Survey	In the past year	0.2	5.0	4.3	3.0	⇧ +2.8
	In the next year	3.0	3.0	3.0	2.0	⇩ -1.0
	In the next 5 years	2.0	2.0	2.0	2.0	⇨ +0.0

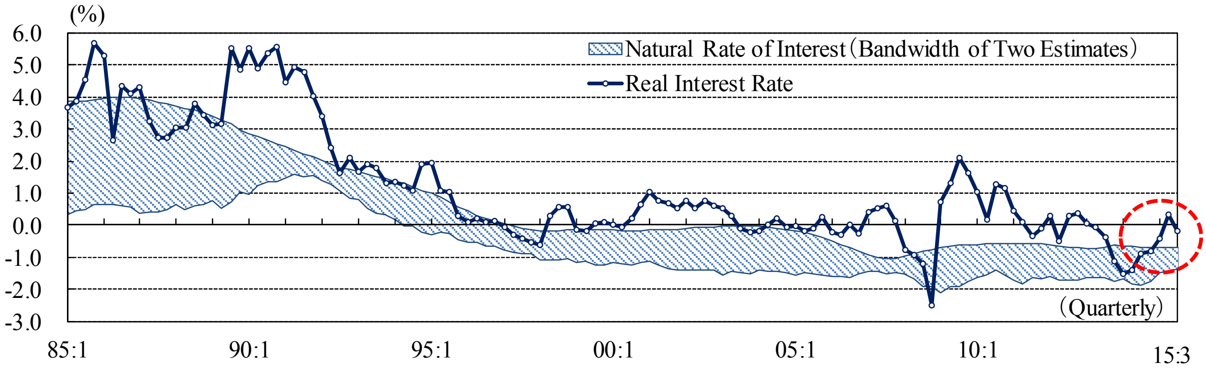
(Note) 1. Daily/monthly data have been converted into quarterly data.
2. ESP forecasts exclude consumption tax-hike effects. Dec 2012, June 2014, Dec 2015 and June 2016 values are used for the periods A through D.
3. Consensus forecasts: Oct 2012, April 2014, Oct 2015 and April 2016 values are used for the periods A through D.
4. Tankan: All industries/ all enterprises data, average.
5. Consumer confidence survey: All households' data, weighted average.
6. BOJ opinion survey: median data.
(Source) JCER, QUICK, Bloomberg, BOJ, Cabinet Office

On the other hand, replacement of the expression that the BOJ will "achieve" the 2% target with the phrase "until the year-on-year rate of increase in the observed CPI exceeds the price stability target of 2 percent and stays above the target in a stable manner" represents a firming of the BOJ's clear commitment. This is because it means that the BOJ has now promised to continue its easing policy even after the core CPI inflation rate reaches 2% (its inflation overshooting commitment). The BOJ has enhanced its flexibility by scrapping the two-year target but has bound itself by committing to maintain easing until the observed increase in the CPI remains above 2% "in a stable manner." It appears that, through the "adaptive formation mechanism of inflation expectations" (in which the public expects the rate of inflation experienced in the past to continue into the future), the BOJ aims to lift the expected inflation rate and to cause real interest rates to fall.

Importance of Boosting the Natural Interest Rate in Tandem with Monetary Policy

Since low inflation and slow growth have plagued Japan for so long, it's been necessary to consider frameworks for a resilient monetary policy. Japan's natural rate of interest sank into negative territory around 1997 amid severe financial instability (Figure 4). It was about -0.7% most recently in the July-September quarter of 2015 and, except for temporary periods, as during the 2008 global financial crisis and after the adoption of QQE, it has consistently remained below real interest rates. During these periods, prices may be seen as having been under deflationary pressure. At the same time, the BOJ in its Comprehensive Assessment judged that "real interest rates have been well below the natural rate of interest, leading to an improvement in financial conditions." Has the BOJ thus concluded that the economy is in a state of inflation? A number of estimates regarding the natural rate of interest have been made, and a look at figures and tables set forth in publicly released materials indicates that the most recent figures for the natural rate of inflation show a value of about -0.3%, meaning that real interest rates may in fact be higher than the natural rate of interest. The BOJ has itself indicated that, in addition to monetary policy, efforts to proceed with structural reforms and to strengthen the growth rate will also be important in boosting the natural rate of interest.

Figure 4. Japan's Natural Rate of Interest



(Source) Estimated by JCER Financial Research Team

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